

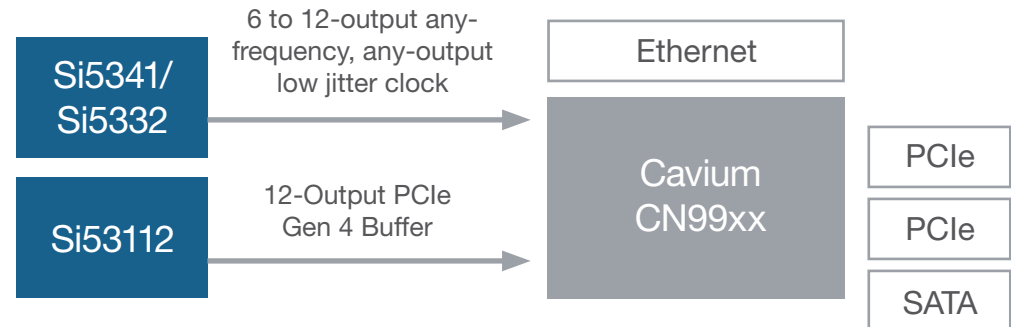
Timing Solutions for Cavium Processors

Timing Simplified

Silicon Labs offers a broad portfolio of frequency flexible timing products that enable hardware designers to simplify clock generation, distribution, and jitter attenuation. The portfolio includes:

- Network synchronizers
- Jitter attenuating clocks
- Clock generators
- Clock buffers
- PCIe clocks and buffers
- Oscillators (XO/VCXO)

Silicon Labs clocks use proprietary DSPLL and MultiSynth technologies to generate any combination of frequencies with ultra-low jitter, enabling best-in-class clock tree integration. Clock buffers provide low-jitter, low-skew clock distribution with integrated format/voltage level translation. PCIe clocks/buffers combine Gen 1/2/3/4 compliance with on-chip series termination, simplifying design. XO/VCXOs are factory-customizable to any frequency, with samples available in one to two weeks.



For more information related to reference designs or partner pricing, please contact your local Silicon Labs sales representative.



Oscillators

- Any frequency up to 1.5 GHz
- Ultra-low jitter: 80 fs RMS
- Short lead times: 1-2 weeks (samples)



Clock Generators

- Any-frequency, any-output
- Ultra-low jitter: 90 fs RMS
- Clock tree on a chip replaces clocks and XOs



Clock Buffers

- Integrated format/level translation
- Ultra-low additive jitter: 50 fs RMS
- PCI Express Gen 1/2/3/4 compliant



Jitter Attenuating Clocks/Network Sync

- Any frequency, any output
- Ultra-low jitter: 90 fs RMS
- Clock tree on a chip replaces clocks, XOs, VCXOs

Timing Solutions for Cavium



Silicon Labs						
Cavium Product Family	Cavium Part Number	XO	Clock Buffers	Clock Generators	PCIe Clocks	PCIe Buffers
ThunderX / ThunderX2 ARM Processors	CN99xx CN88xx CN87xx	Si54x	Si5330x	Si534x Si5332	Si5214x (3.3V) Si522xx (1.5V, 1.8V)	Si5315x (3.3V) Si532xx (1.5V, 1.8V)
Xpliant 10/25/50/100GbE Switches	CNX880xx CNX780/680xx	Si54x	Si5330x	Si534x Si5332	Si5214x (3.3V) Si522xx (1.5V, 1.8V)	Si5315x (3.3V) Si532xx (1.5V, 1.8V)
OCTEON TX 64-bit ARM Processors	CN83xx CN82xx CN81xx CN80xx	Si51x	Si5330x	Si534x Si5332	Si5214x (3.3V) Si522xx (1.5V, 1.8V)	Si5315x (3.3V) Si532xx (1.5V, 1.8V)
OCTEON III Multi-Core MIPS64 Processors	CN7xxx CN78xx CN70xx	Si51x	Si5330x	Si5332	Si5214x (3.3V) Si522xx (1.5V, 1.8V)	Si5315x (3.3V) Si532xx (1.5V, 1.8V)
OCTEON II Multi-Core MIPS64 Processors	CN68xx CN67xx CN66xx CN63xx CN62xx CN61xx CN60xx	Si51x	Si5330x	Si5332	Si5214x (3.3V) Si522xx (1.5V, 1.8V)	Si5315x (3.3V) Si532xx (1.5V, 1.8V)
OCTEON Plus	CN58xx CN57xx CN56xx CN55xx CN54xx CN52xx CN50xx	Si51x	Si5330x	Si5332	Si5214x (3.3V) Si522xx (1.5V, 1.8V)	Si5315x (3.3V) Si532xx (1.5V, 1.8V)
OCTEON Fusion Basestation Processors	CNF7100	Si51x	Si5330x	Si5332	Si5214x (3.3V) Si522xx (1.5V, 1.8V)	Si5315x (3.3V) Si532xx (1.5V, 1.8V)
NITROX Security Processors	NITROX V NITROX III NITROX PX	Si51x	Si5330x	Si5332	Si5214x (3.3V) Si522xx (1.5V, 1.8V)	Si5315x (3.3V) Si532xx (1.5V, 1.8V)

For more information, visit www.silabs.com/timing

Request a custom clock or XO/VCXO at www.silabs.com/custom-timing